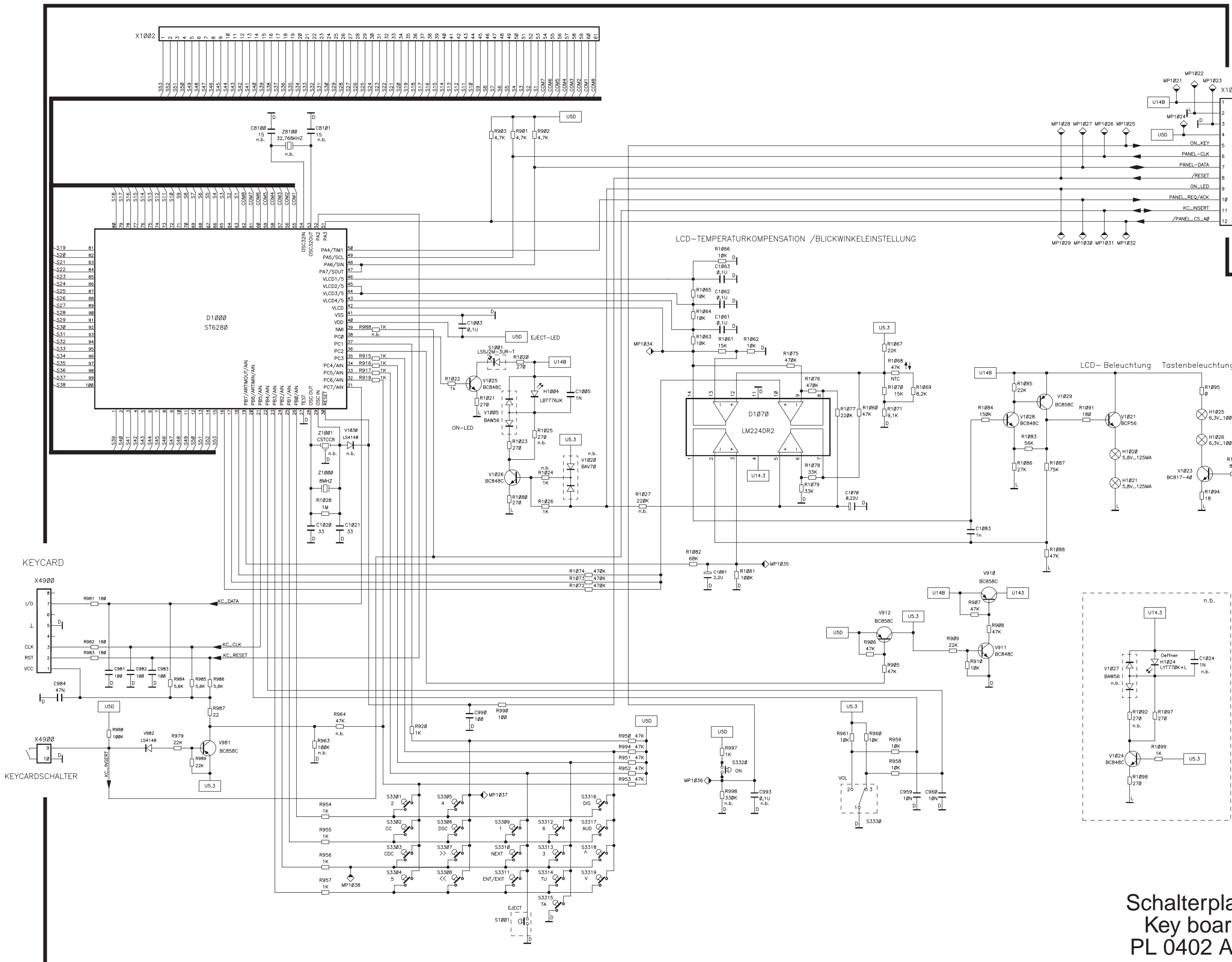
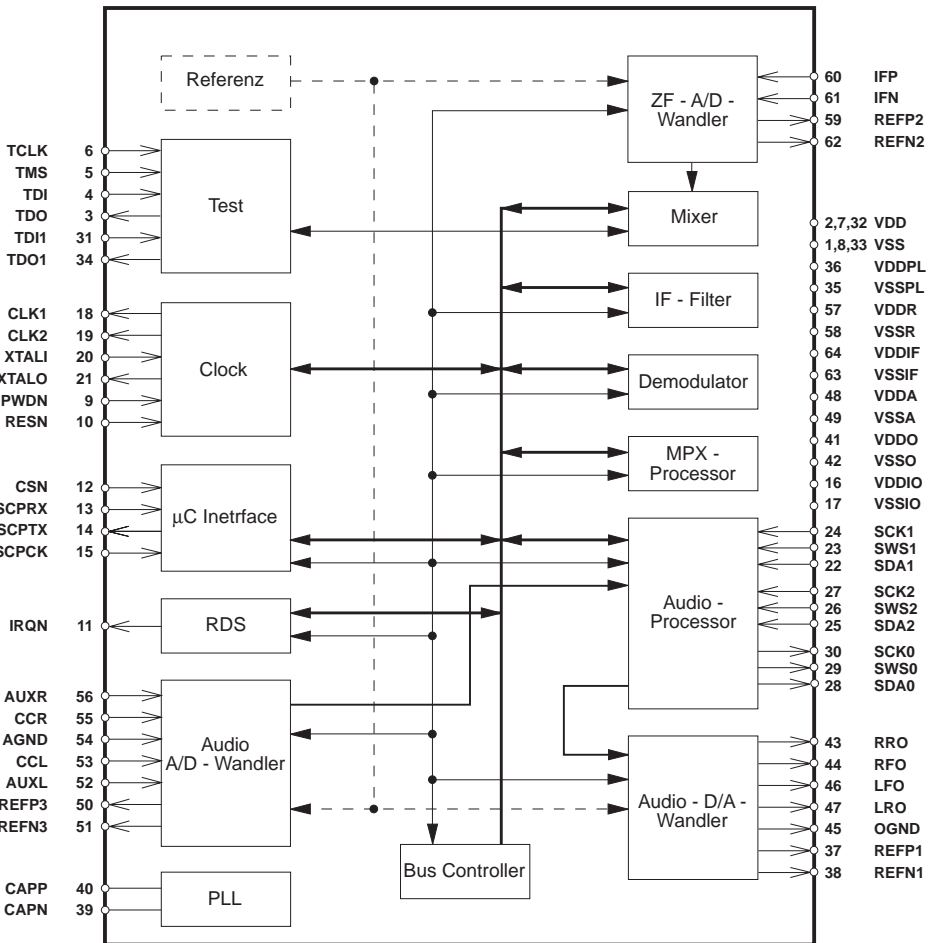


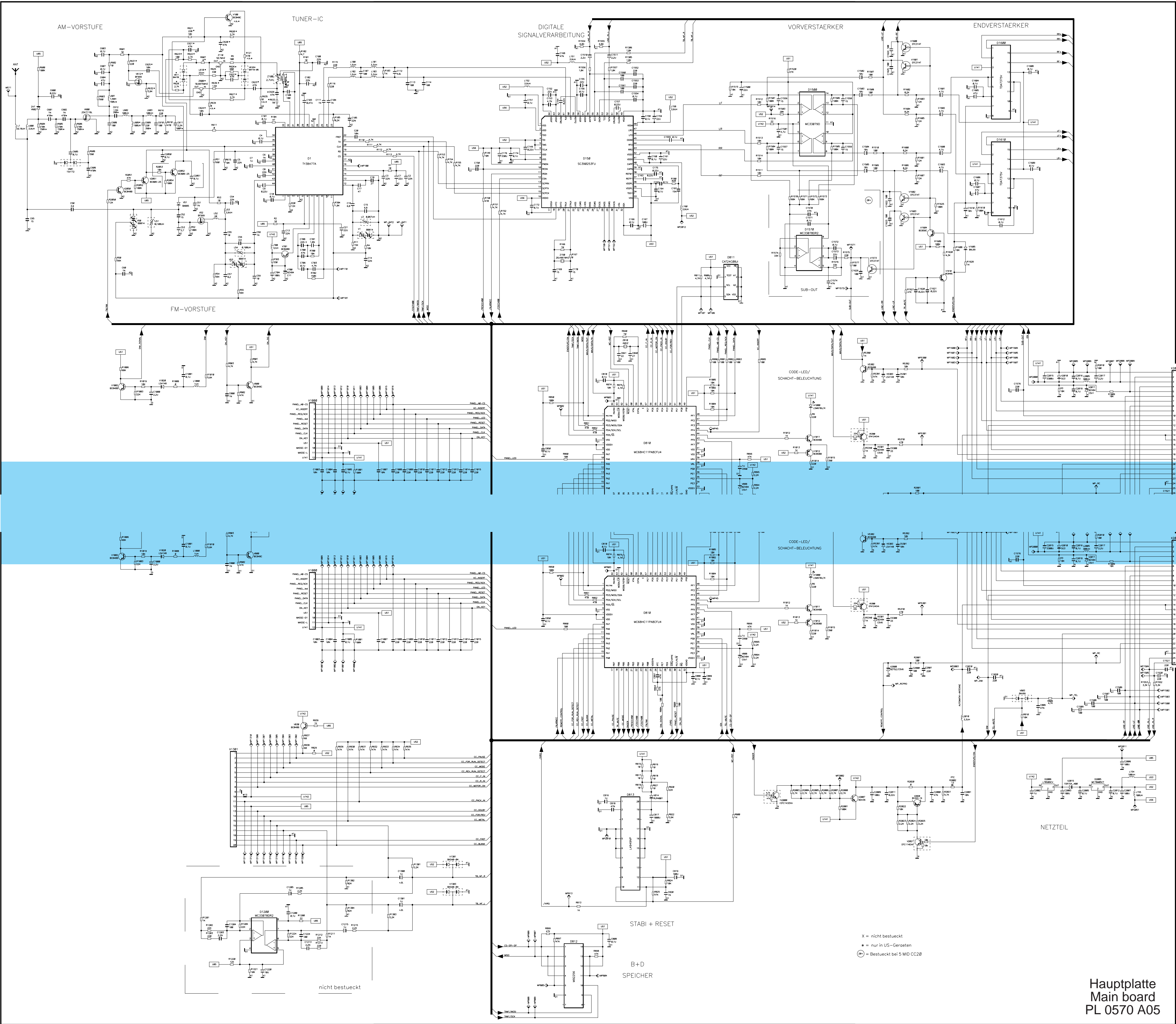
Pin-Belegung des FM/AM Tuner-IC D1				
Tuner IC D1 Pin configuration				
Pin No.	I/O	Name	Funktion	Function
1	-	MIXDEC	Mischer Entkopplung	Mixer decoupling
2	-	CINT	for PLL	for PLL
3	-	CHOLD	for PLL	for PLL
4	-	PLLGN2	PLL - Masse	PLL Ground
5	-	VCC	8,5V	8,5V
6	-	VPLL	PLL Oberspannung	PLL top voltage
7	I	LF1NP	Schleifenfiltereingang	PLL loop filter input
8	I	LF1	Schleifenfilter 1	PLL loop filter Output 1
9	O	LF2	Schleifenfilter 2	PLL loop filter Output 2
10	O	LF3	Schleifenfilter 3	PLL loop filter Output 3
11	I	VTUNE	Abstimmungsspannung	Tuning voltage
12	I	OSCINP	Oszillator Eingang	Oscillator Input
13	O	OSCOU2	Oszillator Ausgang	Oscillator Output
14	-	OSCGND	Oszillator Masse	Oscillator Ground
15	O	VCC	8,5V	8,5V
16	O	OSCBUF	Oszillatorausgangstreiber	Oscillator Buffer Output
17	I	DGND	Digitale Masse	Digital Ground
18	I	CS	Chip Select	Chip Select
19	I	RD	Dateneingang	DATA IN
20	I	CLK	Clock	Clock
21	O	TX	Datenausgang	DATA OUT
22	I	RFREF	Referenzfrequenz	Reference frequency
23	-	IFAGC2	ZF Regelspannung 2	IF AGC 2
24	O	IFOUT1	ZF - Ausgang 1	IF output 1
25	O	IFOUT2	ZF - Ausgang 2	IF output 2
26	-	IFAGC1	ZF Regelspannung 1	IF AGC 1
27	-	IFGND	ZF Masse	IF Ground
28	I	IFIN	ZF Eingang	IF Input
29	-	VDC	Interne Referenzspannung	Internal reference voltage
30	-	VCC	8,5V	8,5V
31	O	MIXOUT2	Mischerausgang 2	Mixer Output 2
32	O	MIXOUT1	Mischerausgang 1	Mixer Output 1
33	-	AMREF	AM - Referenzeingang	AM reference input
34	I	AMMIXIN	AM Mischereingang	AM Mixer input
35	O	RFAGC3	HF Regelzeitkonstante (aufregeln)	RF AGC 3
36	O	RFAGCAM	HF Steuerspannung (Vorstufe AM)	RF AGC for AM input stage
37	O	RFAGCFM	HF Steuerspannung Vorstufe FM	RF AGC for FM input stage
38	-	MIXGND	Mischer Masse	Mixer Ground
39	-	RFAGC2	HF Regelzeitkonstante (Detektor)	RF AGC 2
40	-	RFAGC1	HF Regelzeitkonstante (abregeln)	RF AGC 1
41	-	ANGND	Analog Masse	Analog ground
42	-	FM MIXREF	Referenzspannung FM Mischer	Reference voltage FM mixer
43	I	FM MIXINP	FM Mischer Eingang	FM mixer input
44	-	RFAGCD	AGC Entkopplung	AGC decoupling

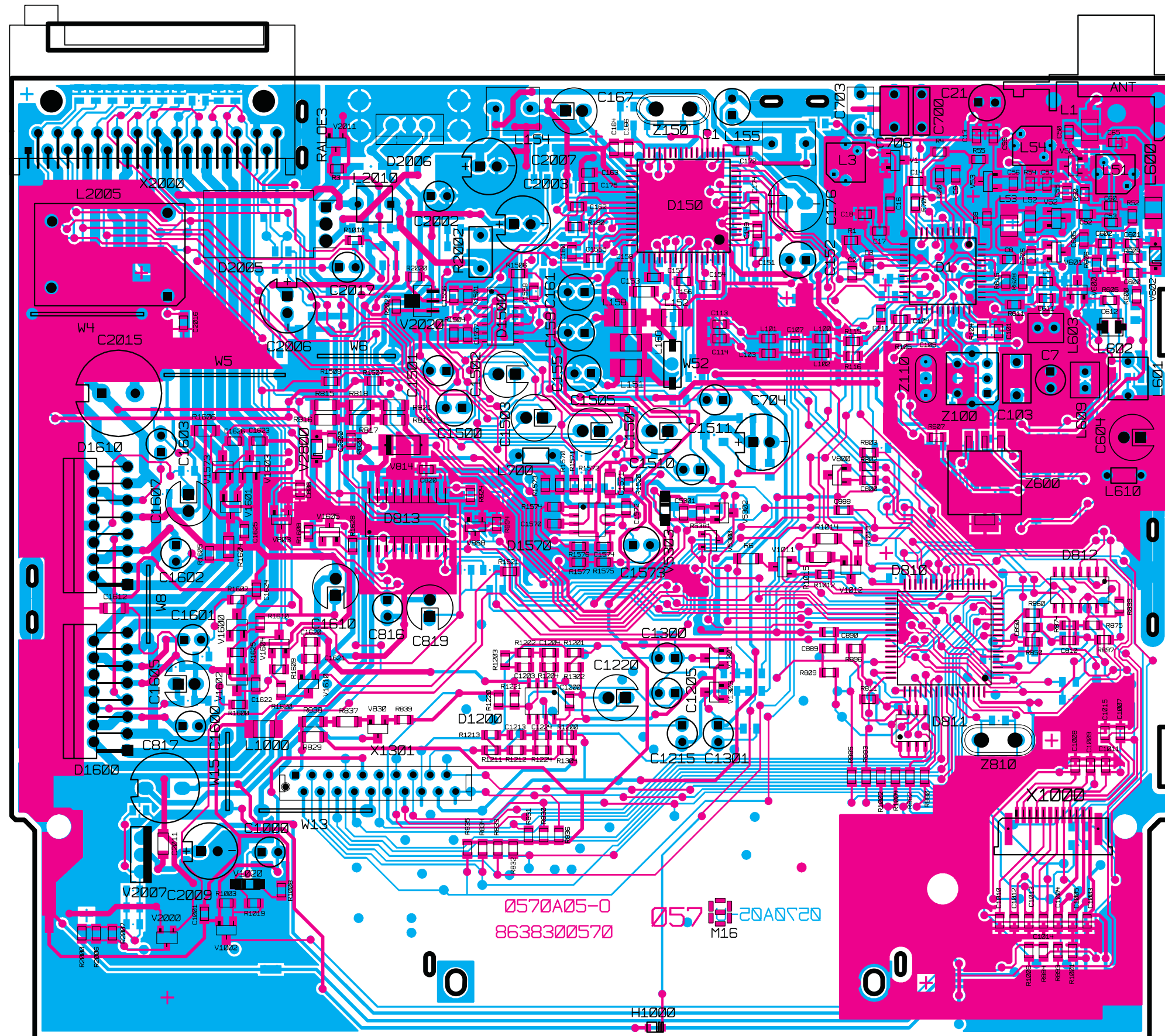
Prüfdiagnose Tuner IC (D1) Diagnosis test tuner IC (D1)						
Pin	Band	Frequenz	E'	Uss	Vermerke	Notice
24+25 (ZF-OUT)	FM	97,1 MHz	83 dbµV	650 mVss	jeweils gegen Masse	respective against GND
28	FM	97,1 MHz	80 dbµV	25 mVss		
31+32	FM	97,1 MHz	80 dbµV	200 mVss	jeweils gegen Masse	respective against GND
31+32	AM	900 kHz	80 dbµV	200 mVss	jeweils gegen Masse	respective against GND
34 (AM-IN)	AM	900 kHz	80 dbµV	50 mVss		
36	AM	900 kHz	ab 73 dbµV		künstliche Antenne aus	not commutated
37	FM	97,1 MHz	ab 80 dbµV			



Schalterplatte
Key board
PL 0402 A08

Pin-Belegung des IC D150				
Digital IC D150 Pin Configuration				
Pin No.	I/O	Name	Funktion	Function
1	-	VSS	Masse	Ground
2	-	VDD	5 V	5 V
4	I	TDI	Testdateneingang	Test Data Input
5	I	TMS	Test Mode	Testmode
6	I	TDCLK	Test Clock	Testclock
7	-	VDD	5 V	5 V
8	-	VSS	Masse	Ground
9	-	PWDN	Power down Zustand	Power down Mode
10	I	RESN	Reset	Hardware reset (active LOW)
11	O	IRGN	RDS Alarm/SLS	RDS alarm/search stop
12	I	CSN	Chip select Eingang	Chip select µC interface
13	I	SCRPRX	Serielle Daten µC Interface	Serial data µC interface IN
14	O	SCPTX	Serielle Daten µC Interface	Serial data µC interface OUT
15	I	SCPCCK	Clock µC Interface	Clock µC interface
16	-	VDDIO	Plusspannung Digitale Ein-/Ausgänge	Voltage for digital I/O
17	-	VSSIO	Masse Digitale Ein-/Ausgänge	Ground for digital I/O
18	O	CKL1	Programmierbarer Clock 1	Programmable clock 1
20	I	XTALI	28.5 MHz Oszillator	Oscillator 28.5 MHz
21	O	XTALO	28.5 MHz Oszillator	Oscillator 28.5 MHz
31	I	TDI1	Testdateneingang 1	Test Input 1
32	-	VDD	5 V	5 V
33	-	VSS	Masse	Ground
35	-	VSSPLL	Masse (minus) PLL	Ground (minus) PLL
36	-	VDDPLL	Plus PLL 5V	PLL 5V (pos.)
37	O	REFP1	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
38	O	REFN1	Audio D/A-Wandler Negative Referenz	Audio D/A converter (neg. reference)
39	-	CAPN	PLL Kapazität (negativ)	PLL capacity (neg.)
40	-	CAPP	PLL Kapazität (positiv)	PLL capacity (pos.)
41	-	VDDO	Audio D/A - Wandler 5V	Audio D/A converter (+5V)
42	-	VSSO	Audio D/A - Wandler Masse	Audio D/A converter (ground)
44	O	RFO	Audio Rechts (analog)	Analogic audio right
45	-	OGND	Masse Analogausgänge	Ground
46	-	LFO	Audio Links (analog)	Analogic audio left
48	-	VDDA	5V A/D - Wandler	5V A/D - converter
49	-	VSSA	Masse A/D - Wandler	Ground A/D - converter
50	O	REFP3	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
51	O	REFN3	Audio D/A-Wandler Negative Referenz	Audio D/A converter (neg. reference)
52	I	AUXL	Externer Eingang links	Auxiliary left
53	I	CCL	Cassette Eingang links	Cassette input left
54	-	AGND	Audioeingänge Masse	Ground for Audio inputs
55	I	CCR	Cassette Eingang rechts	Cassette input right
56	I	AUXR	Externer Eingang rechts	Auxiliary left right
57	-	VDDR	5 V	5 V
58	-	VSSR	Masse	Ground
59	O	REFP2	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
60	I	IFP	ZF Eingang (plus)	Positif IF input
61	I	IFN	ZF Eingang (minus)	IF input (neg.)
62	O	REFN2	Audio D/A-Wandler Negative Referenz	Audio D/A converter (neg. reference)
63	-	VSSIF	ZF A/D - Wandler (minus)	IF A/D converter (-)
64	-	VDDIF	ZF A/D - Wandler 5 V	IF A/D converter (+5V)





zu Schaltbild

Chicago RCM 169

Paris RCM 169

Kansas DJ

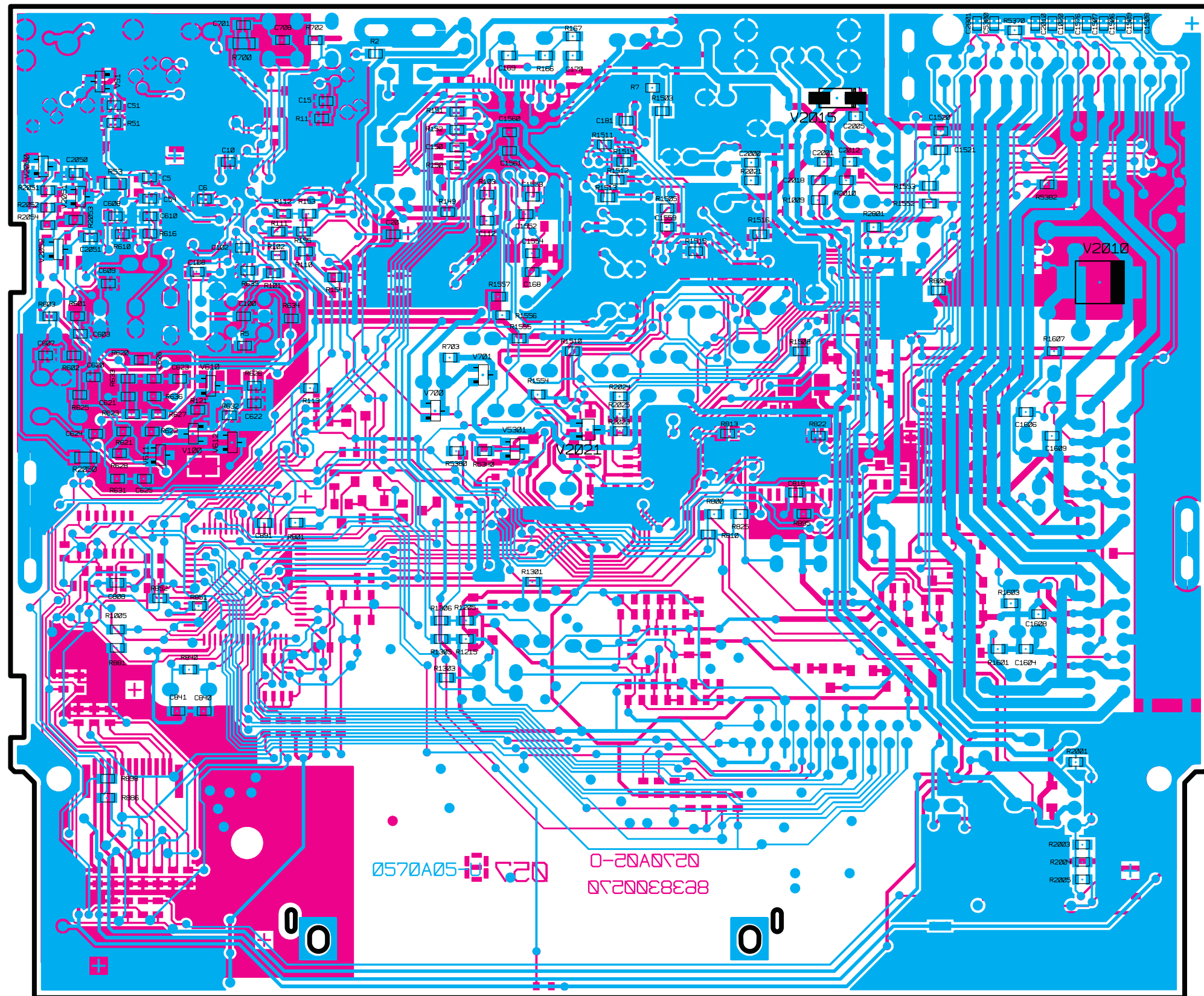
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Hauptplatte
Main board
PL 0570 A05

Chip



zu Schaltbild

Chicago RCM 169
Paris RCM 169
Kansas DJ

8 622 401 999
8 622 401 999
8 622 401 999

CASSETTEN LAUFWERK
CASSETTE MECHANISM
ALPS CMGR-S
8 638 811 913

